What is claimed is:

1. An apparatus for cutting pattern pieces and creating apertures in sheet-type work material, comprising:

a frame;

a support surface mounted on said frame for carrying at least one layer of sheet-type work material thereon,

a carriage coupled to said frame for movement back-and-forth there along in a first coordinate direction in response to commands issued from a controller;

a cutting head mounted to said carriage for movement back-and-forth there along in a second coordinate direction generally perpendicular to said first coordinate direction in response to commands issued from said controller;

a rotary die rotatably coupled to said cutting head;

at least one cutting tool coupled to said rotary die , said cutting tool having a shaped cutting portion corresponding to the shape of an aperture to be formed in said work material;

said rotary die being movable between a working position wherein said at least one cutting tool engages said work material, and a non-working position wherein said rotary die is positioned away from said work material.

2. An apparatus as defined by claim 1, further comprising a cutter coupled to said cutting head for movement between a working position wherein said cutter engages said work material and a non-working position wherein said cutter is positioned away from said work material, and wherein said cutter is positioned adjacent to said rotary die when each is in said working position, thereby allowing pattern pieces to be simultaneously cut and notched in response to commands issued from said controller.

3. An apparatus as defined by claim 2 further comprising at least one drive means for moving said rotary die and said cutter between said working and said non-working positions.

4. An apparatus as defined by claim 3 wherein said at least one drive means includes first drive means coupled to and positioned between said rotary die and said cutter head for moving said rotary die between said working and non-working positions, and second drive means positioned between said cutter and said cutter head for moving said die cutter between said working and non-working positions.

5. An apparatus as defined by claim 4 wherein said first and second drive means can be simultaneously or independently actuated.

6. An apparatus as defined by claim 3 wherein said at least one drive means is a stepper motor.

7. An apparatus as defined by claim 3 wherein said at least one drive means is a pneumatic cylinder.

8. An apparatus as defined by claim 3 wherein said at least one drive means is a hydraulic cylinder.

9. An apparatus as defined by claim 1 wherein said rotary die rolls about a first rotational axis and can be oriented by moving said rotary die about a second rotational axis approximately perpendicular to said first rotational axis.

10. An apparatus as defined by claim 2 wherein said cutter is a rotary die that defines a sharpened peripheral edge, said rotary die rotatably coupled to said cutting head.

11. An apparatus as defined by claim 10 wherein, said rotary die rolls about a first rotational axis and can be oriented by moving said rotary die about a second rotational axis approximately perpendicular to said first rotational axis, and said cutter rotates about a third rotational axis approximately coaxial with said first rotational axis and can also be oriented by rotation about said third rotational axis.

12. An apparatus as defined by claim 1 wherein:

a plurality of cutting tools are mounted on said rotary die and are spaced-apart from one another in a predetermined manner so that patterns of apertures can be cut during operation.

13. An apparatus as defined by claim 12 wherein said plurality of cutting tools are each pivotally coupled to said rotary die for movement between a cutting position wherein said cutting tool can operably engage said work material to cut an aperture therein, and a rotated position wherein said cutting tool cannot operably engage said work material.

14. An apparatus as defined by claim 13 wherein said rotary die includes a plurality of shaped recesses, at least a portion of which have one of said cutting tools pivotally mounted therein, and wherein an edge portion of said cutting tools abuts an edge defining said recess when said cutting tool is in said rotated position.

15. An apparatus as defined by claim 1 further comprising:

a tool changer coupled to one of said frame, said carriage, and said cutting head, said tool changer being adapted to releasably carry at least one cutting tool;

said rotary die including carrying means for removing said at least one cutting tool from said tool changer and releasably retaining it thereon; and wherein

said rotary die is selectively indexable relative to said tool changer so as to operably position said carrying means relative to said tool changer.

16. An apparatus as defined by claim 1 further comprising an actuator positioned between said rotary die and said cutting head for selectively indexing said rotary die to position a desired cutting tool mounted on said rotary die, in working proximity to said work material.

17. An apparatus as defined by claim 16 wherein said actuator is a stepper motor.

18. An actuator as defined by claim 16 wherein said actuator is a servo motor.